as being unpatentable over Yang et al. in view of Nguyen et al. (U.S. Patent No. 6,043,164).

Applicant respectfully requests reconsideration and withdrawal of the rejections set forth in the above-identified Office Action.

REJECTIONS UNDER 35 U.S.C. § 102

The Examiner rejected claims 32-34 under 35 U.S.C. § 102(b) as being anticipated by Berglund et al., according to the rationale discussed on paragraphs 2 and 3 of the Office Action. Applicant respectfully traverses this rejection.

Each of claims 32-34 is drawn to a different combination of method steps that is patentable over the disclosure of Berglund et al. In particular, Berglund et al. lacks disclosure of, among other things, "ashing the film with a first high-frequency biasing power level substantially halfway through the resist film, after etching," as recited in independent claim 32. Instead of using high-frequency RF biasing power, Berglund et al. merely uses DC biasing power level." See, e.g., col. 3, lines 56-63, col. 4, lines 25-27, and col. 5, lines 48-50).

At least for this reason, Berglund et al. fails to anticipate the claimed invention. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

In the Office Action, the Examiner rejected claims 18-28 and 38-40 under 35 U.S.C. § 102(e) as being anticipated by Yang et al., according to the rationale discussed on paragraph 4 of the Office Action. While this rejection is rendered moot by the cancellation of the claims, Applicant respectfully traverses the Examiner's reasoning for the rejection.

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In response to Applicant's argument filed on September 17, 2002, the Examiner asserts that "Yang clearly discloses applying a high frequency bias power on a wafer and the bias power applied on the wafer can be reduced, and even eliminated in a subsequent step to remove the photoresist film."

Applicant respectfully submits that in Yang et al. there is no subsequent step in which a high-frequency bias power applied on the wafer is reduced or eliminated from the beginning of the ashing to prevent plasma damage suffered from the conventional high bias power. In place of cancelled claims 10-28 and 38-40, Applicant has newly presented claims 41-62 to more clearly define features of the present invention. In particular, Applicant clearly recite applying the high-frequency power for biasing while removing a photoresist film and stopping the application of the high-frequency power for biasing in the middle of removing the photoresist film while the photoresist film is still remaining. Applicant, therefore, respectfully submits that there can be no disclosure in Yang et al. of "stopping application of the high-frequency power for biasing before the photoresist film becomes completely removed."

In addition, claims 10-28 and 38-40 have been newly presented in claims 41-62 to more clearly recite the "fence portion," In particular, new independent claims 41, 46, 52, and 57 include a recitation of "a fence portion distending toward the upper portion of a surrounding edge of the opening," However, neither Yang et al. nor other cited references discloses the recited structure of the fence portion.

At least for these reasons, Yang et al. fails to anticipate the claimed invention. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 103(a)

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The Examiner rejected claims 10-17 under 35 U.S.C. § 103(a) as being unpatentable over Yang et al. in view of Nguyen et al., according to the rationale discussed on paragraphs 5-6 of the Office Action. While this rejection is rendered moot by the cancellation of claims 10-17, Applicant respectfully traverses the Examiner's reasoning for this rejection. In place of cancelled claims 10-17, Applicant has presented new claims 41-48 to more clearly recite features of the present invention.

As discussed above, each of new independent claims 41 and 46 includes a recitation of "a fence portion distending toward the upper portion of a surrounding edge of the opening." However, neither Yang et al. nor Nguyen et al. discloses this recited structure of the fence portion. At least for this reason, the claimed invention defines novel and non-obvious subject matter over the cited prior art.

Worth noting is that, in response to Applicant argument filed on September 17, 2002, the Examiner continues to assert that "since the motivation to combine the references comes from Nguyen, one skilled in the art would have found it obvious to incorporate Nguyen teaching into Yang method to produce the claimed invention." Applicant respectfully submits that "the evidence of a teaching, suggestion, or motivation to combine must be 'clear and particular.'" In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). The Examiner's asserted motivation to combine, however, is not clear and particular, since it is unclear why one of ordinary skill in the art is motivated to take teachings of Nguyen et al. and incorporate it in the method of Yang et al., especially when Yang et al. and Nguyen et al. utilize different gases from one another and operate under different operational characteristics. In addition, the asserted combination of Yang et al. and Nguyen et al. does not show a reasonable expectation of

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success because it is unclear as to how the via etching method of Nguyen et al. could be incorporated into the in-situ plasma-etching step of Yang et al.

At least for these reasons, the asserted combination of Yang et al. and Nguyen et al. fails to establish a *prima facie* case of obviousness under 35 U.S.C. § S.C. § 103(a) and, thus, the claimed invention is not rendered obvious over the cited prior art. Reconsideration and withdrawal of this rejection is respectfully requested.

## CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration of this application and the timely allowance of all pending claims 32-34 and 41-62.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: January 31, 2003

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## APPENDIX TO AMENDMENT

**IN THE CLAIMS:**

32. (Amended) A plasma processing method comprising:

etching a film by utilizing a resist film as a mask;

ashing the film with a first high-frequency biasing power level substantially halfway through the resist film, after etching; and

applying a second high-frequency biasing power level equal to zero, after ashing with the first high-frequency biasing power level.

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